UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

IN RE: PROTON-PUMP INHIBITOR PRODUCTS LIABILITY LITIGATION (NO. II) **This Document Relates to:** ***Kersch v. AstraZeneca LP,*** **No. 2:18-cv-03159** ***Rieder v. AstraZeneca Pharmaceuticals LP,*** **No. 2:19-cv-00850**	Case No. 2:17-md-2789-CCC-MF (MDL 2789)

MEMORANDUM OF LAW IN SUPPORT OF DEFENDANTS' MOTION TO EXCLUDE OPINION TESTIMONY FROM PLAINTIFFS' SPECIFIC CAUSATION EXPERTS UNDER FEDERAL RULE OF EVIDENCE 702

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PRELIMINARY STATEMENT

This Court should exclude the specific causation opinions of Plaintiffs' experts under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Each of Plaintiffs' specific causation experts—Dr. Derek Fine (in *Rieder*), Dr. Richard Lafayette (in *Nelson*), Dr. David Powers (in *Bales* and *Lee*), and Dr. Jeffrey Silberzweig (in *Foster* and *Kersch*)—opines, often at odds with the treating physician, that proton pump inhibitor medications ("PPIs") caused or substantially contributed to a particular Plaintiff's kidney injury, most typically chronic kidney disease ("CKD"). Yet each expert fails to offer a reliable basis for his conclusion.

As a threshold matter, Plaintiffs must establish a viable theory of general causation (*i.e.*, that PPIs are capable of causing CKD) as a condition precedent to offering a specific causation opinion (*i.e.*, that PPIs caused a specific Plaintiff's CKD). As shown in Defendants AstraZeneca Pharmaceuticals LP, AstraZeneca LP,[1] and Merck Sharp & Dohme Corp.'s ("Merck") (collectively, "Defendants") contemporaneously filed motion, Plaintiffs fail to offer a viable theory of general causation. For that reason alone, the Court should exclude the specific causation opinions of Plaintiffs' experts.

[1] Defendant AstraZeneca LP dissolved as a legal entity on December 31, 2018.

In addition, the Court should exclude the specific causation opinions of Plaintiffs' experts because they are unreliable. Each Plaintiff's kidney disease is fully explained by factors other than PPIs. For instance, several Plaintiffs have longstanding diabetes and/or hypertension—the two most common causes of CKD in the United States. Others are obese, have kidney stones, are chronically dehydrated from alcohol abuse, and/or are regular users of nonsteroidal anti-inflammatory drugs ("NSAIDs"), each of which is well known to dramatically impact kidney function.

Here, Plaintiffs' experts uniformly fail to explain why these other factors are not the sole cause of Plaintiffs' kidney disease—and that warrants exclusion. Under controlling precedent, "where a defendant points to a plausible alternative cause and the doctor offers *no* explanation for why he or she has concluded that was not the sole cause, that doctor's methodology is unreliable." *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 156 (3d Cir. 1999) (internal quotation marks omitted). Unable to offer this required "explanation," Plaintiffs' experts seek to bootstrap their specific causation opinions onto their general causation opinions. In other words, because Plaintiffs' experts believe that PPIs *can* cause CKD (general causation), they conclude that PPIs *did* cause CKD here (specific causation). That rationale improperly collapses general and specific causation and is not sufficient to establish causation in any specific case: "that exposure to [a substance] may be a risk factor

for [a disease] does not make it an actual cause simply because [the disease] developed." *Guinn v. AstraZeneca Pharms. LP*, 602 F.3d 1245, 1255 (11th Cir. 2010) (alterations in original) (internal quotation marks omitted).

In sum, Plaintiffs' experts fail to explain why other factors were not the sole cause of Plaintiffs' kidney disease, and they attribute kidney disease to PPIs without any reliable, case-specific basis for doing so. Their speculative opinions are a textbook example of the type of expert testimony Rule 702 is designed to exclude.

Finally, Dr. Silberzweig's specific causation opinions in *Foster* and *Kersch* suffer from additional case-specific deficiencies that independently warrant exclusion, as discussed more fully below.

LEGAL STANDARD

Under Federal Rule of Evidence 702, the Court has a "gatekeeping" obligation to "ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Daubert*, 509 U.S. at 589 & n.7. Plaintiffs "bear[] the burden of establishing the admissibility of the testimony by a preponderance of the evidence." *In re Hum. Tissue Prods. Liab. Litig.*, 582 F. Supp. 2d 644, 655 (D.N.J. 2008).

Where, as here, an expert opines that a medication caused or substantially contributed to a plaintiff's injury, the reliability requirement demands plausible, case-specific bases for that opinion. An expert's generalized belief "that exposure

to [a substance] may be a risk factor for [a disease]" is insufficient to establish causation in any particular case. *Guinn*, 602 F.3d at 1255 (alterations in original) (internal quotation marks omitted). Similarly, "[t]he mere existence of a temporal relationship between taking a medication and the onset of symptoms does not show a sufficient causal relationship." *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904–05 (7th Cir. 2007). And where, as here, a doctor purports to use a differential diagnosis and fails to offer an "explanation for why he or she has concluded that" a "plausible alternative cause" was not the sole cause of a plaintiff's injury, "that doctor's methodology is unreliable." *Heller*, 167 F.3d at 156 (internal quotation marks omitted).

LEGAL ARGUMENT

I. THE COURT SHOULD EXCLUDE THE SPECIFIC CAUSATION OPINIONS OF PLAINTIFFS' EXPERTS BECAUSE THERE IS NO ADMISSIBLE GENERAL CAUSATION EVIDENCE

General causation and specific causation are distinct concepts, and Plaintiffs must prove both to prevail. *In re Johnson & Johnson Talcum Powder Prods. Mktg., Sales Pracs. & Prods. Litig.*, 509 F. Supp. 3d 116, 157 (D.N.J. 2020). Stated differently, "a plaintiff must establish general causation before moving to specific causation. Without the predicate proof of general causation, the tort claim fails." *In re Zoloft (Sertralinehydrochloride) Prods. Liab. Litig.*, 176 F. Supp. 3d 483, 491 (E.D. Pa. 2016). As shown in Defendants' contemporaneously filed motion, the

general causation opinions of Plaintiffs' experts should be excluded. As a result, the specific causation opinions of Plaintiffs' experts—that PPIs *did* cause or substantially contribute to kidney disease for Plaintiffs in *Foster*, *Kersch*, *Bales*, *Lee*, *Rieder*, and *Nelson*—must likewise be excluded.

II. THE COURT SHOULD EXCLUDE THE SPECIFIC CAUSATION OPINIONS OF PLAINTIFFS' EXPERTS BECAUSE THEY ARE UNRELIABLE

The specific causation opinions of Plaintiffs' experts should be excluded because they fail to reliably explain why other factors were not the sole cause of Plaintiffs' kidney disease. *Heller*, 167 F.3d at 156 (citing *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 755, 758, 759 n.27 (3d Cir. 1994)).

A. Dr. Silberzweig Fails to Reliably Explain Why Other Diseases Were Not the Sole Cause of Mr. Foster's Kidney Disease

Dr. Silberzweig concedes that diabetes and hypertension are the two most common causes of CKD in the United States. (Silberzweig Dep., attached to the Certification of Gregory J. Hindy ("Hindy Cert."), as Exhibit A, at 565:24–566:3.) He also concedes that Mr. Foster had insulin-dependent diabetes since 1998 and hypertension since 2004, which reached the stage 2, or hypertensive crisis, range multiple times. (*See id.* at 521:17–522:6, 564:9–566:3.) He fails to offer any reliable basis why these diseases were not the sole cause of Mr. Foster's kidney disease.

Mr. Foster's treating physicians attribute his kidney disease to diabetes and hypertension. Dr. Indu Sharma, Mr. Foster's nephrologist who treated him from

2008 through 2020, testified that Mr. Foster's "kidney problems, as per the biopsy[,] are because of longstanding diabetic glomerulosclerosis," and that, had Nexium (a branded PPI medication) been a "secondary cause," "it would have shown up on the biopsy." (Sharma Dep., Hindy Cert., Ex. B, at 38:18–39:7, 41:2–5.) Similarly, Dr. Griggs, Mr. Foster's primary care physician from March 2010 through September 2018, testified that diabetes and hypertension caused Mr. Foster's kidney disease:

> Q. Did you ever make a determination as to what was impacting his kidney functions?
>
> A. Had I?
>
> Q. Had you.
>
> A. So based on the science, the diabetes causes the biggest injury to the kidneys. So diabetic nephropathy is huge and then you also have hypertensive nephropathy. It's a nephrosclerosis that occurs from having long-standing high blood pressure. So between those two, they changed his kidneys.

(Griggs Dep., Hindy Cert., Ex. C, at 28:10–20; *see also id.* at 96:2–5 ("David Foster had a biopsy and . . . it told us why he had kidney disease, it says diabetic nephropathy on his biopsy.").)

The record likewise makes clear that Mr. Foster's diabetes and hypertension were not well-controlled. Doctors diagnosed Mr. Foster with uncontrolled diabetes, described him as noncompliant with treatment recommendations, and advised him to maintain "good control of his blood sugar to prevent further kidney damage." (*Id.*

at 25:7–19, 27:7–20; Sharma Dep., Hindy Cert., Ex. B, at 26:21–25, 50:12–20; Silberzweig Dep., Hindy Cert., Ex. A, at 634:12–20.) During a September 2009 hospitalization, doctors noted that Mr. Foster refused to take insulin and, against his doctors' advice, ate snacks between meals. (*See* Silberzweig Dep., Hindy Cert., Ex. A, at 613:18–614:1, 622:22–623:20; Silberzweig Dep. Ex. 32, Hindy Cert., Ex. D, at 008469.)

His treating physicians also testified that Mr. Foster's hypertension was poorly controlled. (*See* Griggs Dep., Hindy Cert., Ex. C, at 21:10–14; Sharma Dep., Hindy Cert., Ex. B, at 27:19–28:3.) In fact, shortly before Mr. Foster's rapid decline in kidney function from September 2009 through January 2010, his blood pressure was in the stage 2 hypertension range twice, and shortly after that period his blood pressure reached the hypertensive crisis range. (*See* Silberzweig Dep., Hindy Cert., Ex. A, at 606:22–607:3, Silberzweig Dep. Ex. 30, Hindy Cert., Ex. E, at 2 (stage 2 hypertension range at 149/94 on May 14, 2009); Silberzweig Dep., Hindy Cert., Ex. A, at 607:13–608:24; Silberzweig Dep. Ex. 31, Hindy Cert., Ex. F, at 1 (stage 2 hypertension range at 162/94 on June 11, 2009); Silberzweig Dep., Hindy Cert., Ex. A, at 633:14–634:5 (hypertensive crisis range at 206/118 on March 19, 2010).) When asked whether Mr. Foster's hypertension concerned him for development of CKD, Dr. Silberzweig answered: "I certainly would have wanted to see it better controlled." (Silberzweig Dep., Hindy Cert., Ex. A, at 567:22–568:6.)

Dr. Silberzweig thus concedes—as he must—that diabetes and hypertension contributed to Mr. Foster's CKD. (*See id.* at 521:17–522:6, 564:9–566:3.) He also admits that these underlying diseases were not optimally controlled during periods when Mr. Foster's kidney disease progressively worsened. For instance, Dr. Silberzweig agrees that Mr. Foster's diabetes was not ideally controlled during his progression to end-stage renal disease (*see id.* at 566:17–21) and that diabetes may have caused that progression:

> Q. . . . If Mr. Foster did not have adequate control over his diabetes after February of 2009, would that diabetic [nephropathy] -- or could that diabetic [nephropathy] have become worse?
>
> A. There's a correlation between control of diabetes and progression of diabetic [nephropathy]; so it might have.

(*Id.* at 567:14–21.) Similarly, Dr. Silberzweig admits that Mr. Foster's hypertension was "not under optimal control during this period of decline in GFR [glomerular filtration rate]"—a marker of kidney function. (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 7.) And Dr. Silberzweig cannot rule out the possibility that hypertensive episodes impacted Mr. Foster's kidney function.

> Q. . . . So there was a hypertensive crisis -- a stage 2 hypertension in September of 2009 and hypertensive crisis in January 14th, 2010; correct?
>
> A. Yes.
>
> Q. We agree on that?
> Can you rule out those two items as having no impact on Mr. Foster's kidneys?

A. Can I rule out that they had no impact? No, I can't rule that out.

(Silberzweig Dep., Hindy Cert., Ex. A, at 632:18–633:3.) What is more, Dr. Silberzweig admits that additional factors may have contributed to Mr. Foster's baseline CKD, including coronary artery disease, angina, stroke, acute and chronic heart failure, and his weight, which varied from normal to modestly obese. (*See id.* at 535:18–536:8, 537:16–538:8.)

These disease processes alone explain Mr. Foster's kidney disease, and Dr. Silberzweig's failure to offer any reliable basis for excluding these diseases as the sole cause of Mr. Foster's kidney disease dooms his opinion. *See In re Trasylol Prods. Liab. Litig.*, No. 08-MD-01928, 2011 WL 7109295, at *7 (S.D. Fla. Feb. 4, 2011) (excluding expert testimony where the expert "fail[ed] to rigorously consider and rule out other potential sole causes of [plaintiff's] post-operative renal dysfunction . . . before opining that Trasylol was a substantial factor in [plaintiff's] injuries"); *Magistrini v. One Hour Martinizing Dry Cleaning*, 180 F. Supp. 2d 584, 610 (D.N.J. 2002) (excluding expert's testimony where "his ultimate expert decision to discount smoking as an alternative cause of Plaintiff's [leukemia] is not based on any reliable method"); *see also In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. & Prods. Liab. Litig.*, 185 F. Supp. 3d 786, 800 (D.S.C. 2016) (a specific causation expert "must offer an explanation as to why . . . other recognized causes, alone, are not responsible for the disease in a particular plaintiff").

Dr. Silberzweig simply tacks on Nexium as an unquantifiable contributor to Mr. Foster's kidney disease, opining that Nexium purportedly caused "rapidly progressive kidney dysfunction . . . which, in conjunction with his diabetes and hypertension, led to end-stage renal disease." (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 6.) Specifically, Dr. Silberzweig contends that Mr. Foster had Nexium-induced acute tubulointerstitial nephritis ("AIN") beginning sometime between March 2009 and January 2010, "progressing to chronic tubulointerstitial disease [CIN] with downstream consequence of tubular fibrosis and scarring and resultant, irreversible kidney failure." (*Id.*; Silberzweig Dep., Hindy Cert., Ex. A, at 490:17–492:3.)

There is no evidence to support Dr. Silberzweig's speculation that Mr. Foster experienced Nexium-induced AIN that then progressed to CIN. As Dr. Silberzweig concedes, Mr. Foster's February 2009 kidney biopsy shows no evidence of Nexium-induced AIN; indeed, he agrees with the treating radiologist that the biopsy shows diabetic nephropathy and no evidence of AIN or CIN. (*See id.* at 578:19–579:5, 583:22–585:2; Silberzweig Dep. Ex. 25, Hindy Cert., Ex. H, at 000043.)

Dr. Silberzweig's assertion that Mr. Foster experienced Nexium-induced AIN sometime after the February 2009 biopsy does not cure the lack of evidence supporting Dr. Silberzweig's conclusion. As a threshold matter, Mr. Foster began using Nexium years earlier—pharmacy records show eight 30-day Nexium

prescriptions from October 2007 to January 2009, and "he may also have sporadically taken Nexium in 2004 and 2006." (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 5, Ex. C.) That time course serves only to undermine Dr. Silberzweig's opinion; it is implausible that Mr. Foster could begin taking Nexium in 2004 for years without incident, and experience Nexium-induced AIN for the first time more than five years later, but only after his February 2009 kidney biopsy.

Most importantly, there is simply no evidence of AIN in Mr. Foster's case—as underscored by Dr. Silberzweig's own methodology for ruling out hepatitis C as a cause of Mr. Foster's kidney disease. Dr. Silberzweig concedes that hepatitis C, via its association with membranoproliferative glomerulonephritis ("MPGN"), can cause CKD. (Silberzweig Dep., Hindy Cert., Ex. A, at 606:7–10; *see also* Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 9 ("Hepatitis C infection is associated with membranoproliferative glomerulonephritis (MPGN)," which "causes acute nephritis syndrome with acute kidney injury, hypertension hematuria, and proteinuria.").) Yet he purports to rule out hepatitis C as a cause of Mr. Foster's kidney disease on the ground that "Mr. Foster never had a presentation suggestive of MPGN and his biopsy showed no evidence of MPGN." (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 9.) The same is true of Nexium-induced AIN; Mr. Foster "never had a presentation suggestive of [AIN] and his biopsy showed no

evidence of [AIN]." (*See id.*) Dr. Silberzweig's own methodology for ruling out hepatitis C as a cause of Mr. Foster's kidney disease leads to the same conclusion vis-à-vis Nexium. Even though his methodology leads to the same conclusion, Dr. Silberzweig rules out hepatitis C, but not Nexium, as a cause of Mr. Foster's kidney disease.

Nor does Dr. Silberzweig's general opinion that Nexium is a "nephrotoxic drug" (*id.* at 7) fill the evidentiary void of Nexium-induced AIN in Mr. Foster's case. Under settled law, an expert's belief that a medication *can* cause a particular injury does not establish that the medication *did* cause that injury in a particular plaintiff. *See Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790 ("[E]ven if Plaintiffs establish that there is an association between Lipitor and diabetes (i.e., that Lipitor increases the risk of diabetes) and that Lipitor is capable of causing diabetes, it does not necessarily follow [that] Lipitor caused the development of diabetes in a particular plaintiff.").

Dr. Silberzweig contends that there are other mechanisms besides AIN through which Nexium may cause kidney injury (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 6), yet he admits there is no evidence of those mechanisms in Mr. Foster's case:

> Q. Do you have any evidence of hypomagnesemia causing or contributing to the rapid decline of eGFR [estimated glomerular filtration rate] -- which caused the rapid decline in eGFR from September 2009 to January 2010?

A. I don't recall seeing any low magnesium levels, but they were -- magnesium levels were measured infrequently.

. . .

Q. Do you have any evidence of endothelial dysfunction causing or contributing to that drop in eGFR?

A. No.

Q. Do you have any evidence of AKI mediated mitochondrial dysfunction causing or contributing to that rapid drop in eGFR?

A. No.

Q. Do you have any evidence of oxidative stress causing or contributing to that rapid drop in eGFR?

A. No.

(Silberzweig Dep., Hindy Cert., Ex. A, at 641:9–642:8.)

At bottom, Dr. Silberzweig "offers *no* explanation for why he . . . has concluded that [diabetes and hypertension were] not the sole cause" of Mr. Foster's kidney disease. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Foster*.

B. Dr. Silberzweig Fails to Reliably Explain Why Dehydration Was Not the Sole Cause of Mr. Kersch's Kidney Injury

Dr. Silberzweig attributes four discrete episodes of acute kidney injury ("AKI") to Mr. Kersch's use of Nexium: one in July 2015, one in July 2016, one in March 2017, and one in August 2017. (Silberzweig Dep., Hindy Cert., Ex. I, at

388:17–389:17.) When asked at deposition whether "there [are] any other adverse events that you attribute to Nexium," Dr. Silberzweig answered: "No." (*Id.*)

Dr. Silberzweig fails to offer any reliable basis for why these four AKIs are not attributable to dehydration alone. For each AKI, Mr. Kersch—whose December 2020 death certificate notes a history of alcoholism as a significant contributor to death (*see* Stephen Matthew Kersch-DCPOA-000001, Hindy Cert., Ex. J)—presented with an acute rise in serum creatinine that readily resolved after he received medical treatment and hydration, often in the form of intravenous fluids. After each AKI, he returned to baseline kidney function *despite continued use of Nexium*. (Mr. Kersch took Nexium from 2010 to 2018. (Silberzweig Dep., Hindy Cert., Ex. I, at 333:23–334:2.)) Indeed, for each AKI, Dr. Silberzweig admits that (1) dehydration substantially contributed, (2) he cannot quantify the relative contribution of Nexium, and (3) he cannot say whether the AKI would have occurred but for Nexium.

The first AKI occurred July 29, 2015, when Mr. Kersch was admitted to the hospital with an elevated serum creatinine. Dr. Silberzweig admits that when Mr. Kersch was discharged three days later—after treatment with intravenous fluids—his kidney function returned to normal, which "certainly indicates that dehydration was an important factor in his AKI." (*Id.* at 391:21–393:5.) Dr. Silberzweig cannot quantify the relative contribution of Nexium to this AKI and

cannot testify to a reasonable degree of medical certainty that the AKI would not have occurred but for Nexium. (*Id.* at 394:7–22.)

The second AKI occurred July 5, 2016, when Mr. Kersch presented to his primary care physician with an elevated serum creatinine and reported drinking four beers daily, which caused his physician to "[e]ncourage[] alcohol cessation." (*Id.* at 395:18–396:4, 400:3–20; Silberzweig Dep. Ex. 17, Hindy Cert., Ex. K.) By his next office visit in September 2016, Mr. Kersch's serum creatinine had returned to normal, again despite continued use of Nexium. (Silberzweig Dep., Hindy Cert., Ex. I, at 396:9–19.) Dr. Silberzweig conceded that Mr. Kersch's drinking "certainly might have" played a role in Mr. Kersch's July 2016 AKI because "it appears that he had abdominal distension, which is consistent with ascites due to alcoholic cirrhosis." (*Id.* at 400:22–401:8.) Dr. Silberzweig cannot quantify the relative contribution of Nexium to this AKI and cannot testify to a reasonable degree of medical certainty that the AKI would not have occurred but for Nexium. (*Id.* at 402:4–403:13.)

The third AKI occurred March 30, 2017, when Mr. Kersch presented to the hospital with an elevated serum creatinine and reported drinking "about 4 to 6 packs of beers still every day." (*Id.* at 404:23–405:21, 408:7–411:6; Silberzweig Dep. Ex. 18, Hindy Cert., Ex. L.) Dr. Silberzweig admits that when Mr. Kersch left the hospital two days later—after being treated with intravenous fluids—his serum

creatinine returned to normal, which "indicates that dehydration was an important factor in his creatinine spike." (Silberzweig Dep., Hindy Cert., Ex. I, at 406:6–24, 412:6–19.) Dr. Silberzweig cannot quantify the relative contribution of Nexium to this AKI and cannot testify to a reasonable degree of medical certainty that the AKI would not have occurred but for Nexium. (*Id.* at 412:20–413:9.)

The fourth (and final) AKI occurred August 26, 2017, when Mr. Kersch presented to the hospital with an elevated serum creatinine and was diagnosed with AKI—which treating physicians attributed to dehydration, not Nexium. (*Id.* at 418:6–18.) Dr. Silberzweig admits that the next day, following treatment with intravenous fluids, Mr. Kersch's serum creatinine returned to normal, "suggest[ing] that [dehydration] was an important contributing factor" to this AKI. (*Id.* at 422:24–423:7, 423:19–424:14.) As with the first three AKIs, Dr. Silberzweig cannot quantify the relative contribution of Nexium to this AKI and cannot testify to a reasonable degree of medical certainty that the AKI would not have occurred but for Nexium. (*Id.* at 424:15–425:8.)

Plaintiff had a fifth AKI episode in July 2017 when he was admitted to the hospital unconscious and was diagnosed with alcoholism, alcohol withdrawal and delirium tremens. (*Id.* at 426:13–427:4.) Although that event shares the same characteristics as the four AKI events that Dr. Silberzweig attributes to Plaintiff's Nexium use, Dr. Silberzweig does not attribute that fifth AKI event to Plaintiff's

Nexium use. (*Id.* at 428:1–429:23.) But there is no basis to distinguish Plaintiff's fifth event from his other four events and Dr. Silberzweig provides none.

There is no reliable basis for Dr. Silberzweig to rule out dehydration as the sole cause of Mr. Kersch's four AKIs. Dr. Silberzweig's only basis for concluding that Nexium was a "substantial factor in causing the AKI events" is his general belief that "PPI can and does cause AKI in patients." (Silberzweig Report (*Kersch*), Hindy Cert., Ex. M, at 12.) Such reasoning improperly conflates general and specific causation; Dr. Silberzweig's belief that PPIs *can* cause AKI does not establish that PPIs *did* cause Mr. Kersch's AKIs. *See Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790.

In sum, Dr. Silberzweig's opinion that Nexium substantially contributed to four of Mr. Kersch's AKIs is unreliable because he "offers *no* explanation for why he . . . has concluded that [dehydration] was not the sole cause" of the AKIs. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Kersch*.

C. Dr. Powers Fails to Reliably Explain Why Hypertension, NSAIDs, and Aging Are Not the Sole Cause of Mr. Bales's Kidney Disease

Dr. Powers concedes that hypertension is a "leading cause of chronic kidney disease," that NSAIDs are nephrotoxic and a risk factor for CKD, and that renal function declines with age, with roughly half of Americans over 70 having CKD stages 3 through 5. (Powers Dep., Hindy Cert., Ex. U, at 89:6–13, 93:20–95:5,

115:11–14, 130:23–131:3; Powers Dep., Hindy Cert., Ex. N, at 314:21–23.) Dr. Powers fails to offer any reliable basis for why hypertension, NSAIDs, and aging—Mr. Bales is 82—are not the sole cause of Mr. Bales's stage 3 CKD.

Mr. Bales "had a longstanding history of hypertension and nonsteroidal anti-inflammatory drug use." (Gupta Dep., Hindy Cert., Ex. O, at 15:23–16:6.) Treating physicians attribute Mr. Bales's CKD to hypertension and NSAIDs. Dr. Saurabh Gupta, Mr. Bales's nephrologist, testified that "[t]he cause of [Mr. Bales's] chronic kidney disease was hypertension and nonsteroidal anti-inflammatory drug use." (*Id.* at 27:24–28:10.) Similarly, Dr. William Plunkett, Mr. Bales's primary care physician since July 2012, testified that Mr. Bales's CKD is "most likely related to prolonged hypertension." (Plunkett Dep., Hindy Cert., Ex. P, at 30:4–6.)

Dr. Powers's opinion—that "[t]he only possible explanation for the etiology of [Mr. Bales'] CKD was the use of PPIs" (Powers Report (*Bales*), Hindy Cert., Ex. Q, at 10)—directly conflicts with the opinions of Mr. Bales's treating physicians, which Dr. Powers dismisses as "a little superficial." (Powers Dep., Hindy Cert., Ex. N, at 305:4–21.) Dr. Powers's methodology for ruling out hypertension, NSAIDs, and aging as the sole cause of Mr. Bales's CKD is unreliable.

Dr. Powers's basis for ruling out hypertension as a cause of Mr. Bales's CKD is inconsistent with the evidence. As a threshold matter, Dr. Powers testified that, "[t]o make a definitive diagnosis [of hypertensive nephrosclerosis], you always have

to do a biopsy"—but no biopsy was performed in Mr. Bales's case. (*Id.* at 336:11–23.) Despite Dr. Powers's concession that "you always have to do a biopsy" to "definitive[ly] diagnos[e]" hypertensive kidney disease (*id.*), he rules out hypertensive kidney disease on the ground that Mr. Bales's blood pressure was purportedly "well controlled . . . with very little therapy." (Powers Report, Hindy Cert., Ex. Q, at 7; *see also id.* at 5 ("Although he required treatment [for his hypertension], it was minimal and not consistent with that required for resistant (malignant) hypertension . . . .").) Yet Dr. Powers admits that within two weeks of Mr. Bales starting therapy with antihypertensive medicines, his treating physician doubled his dose to bring his blood pressure within adequate control. (Powers Dep., Hindy Cert., Ex. N, at 362:13–363:15.)

Moreover, Dr. Powers assumes that Mr. Bales was not hypertensive before 2009. (Powers Dep., Hindy Cert., Ex. N, at 355:9–356:22.) The record contains measurements of Mr. Bales's blood pressure on just four dates before 2009 (Powers Report (*Bales*), Hindy Cert., Ex. Q, at Ex. D; Powers Dep., Hindy Cert., Ex. N, at 353:18–354:18.) And Dr. Powers concedes that many people do not know that they have hypertension because it can be asymptomatic. (Powers Dep., Hindy Cert., Ex. U, at 90:17–21.) For that reason, contrary to Dr. Powers's assumption, Dr. Morton Rinder, Mr. Bales's expert cardiologist, testified that it is possible that Mr. Bales had hypertension before 2009. (Rinder Dep., Hindy Cert., Ex. R, at 46:4–19.)

Dr. Powers concedes that a 2014 ultrasound shows "smallish" kidneys, which he agrees could be caused by hypertension. (Powers Dep., Hindy Cert., Ex. N, at 332:14–333:21, 334:13–335:1.) Dr. Powers nevertheless concludes that "these are not the ultrasounds of a patient with controlled hypertension" because he believes that controlled hypertension would not cause kidney disease. (Powers Report (*Bales*), Hindy Cert., Ex. Q, at 5; *see also* Powers Dep., Hindy Cert., Ex. N, at 341:14–342:9.) In other words, Dr. Powers rules out hypertension as a cause of CKD because, according to Dr. Powers, "Mr. Bales has no evidence of hypertension being the cause of his kidney disease." (Powers Dep., Hindy Cert., Ex. N, at 342:7–9.) Such circular reasoning is anything but reliable. Dr. Powers offers no methodology, let along a reliable methodology, for ruling out hypertension as the cause of Mr. Bales's CKD.

Dr. Powers's basis for ruling out NSAIDs as a cause of CKD is equally flawed. It is undisputed that Mr. Bales used naproxen, an NSAID, for more than ten years, and over the counter NSAIDs for arthritis. (Bales Dep., Hindy Cert., Ex. S, at 19:20–21:3, 83:8–13, 100:14–24.) And Dr. Powers concedes that, when Mr. Bales "took nonsteroidals, along with his persistent use of PPIs, he tended to have worse kidney function," and that "[w]hen he would stop the nonsteroidal, that portion of the toxicity resolved and he went back to his baseline." (Powers Dep., Hindy Cert., Ex. N, at 392:2–7.) According to Dr. Powers, however, NSAIDs did

not contribute to Mr. Bales's CKD because "NSAIDs caused intermittent vasomotor nephropathy, but not a chronic kidney disease." (Powers Report (*Bales*), Hindy Cert., Ex. Q, at 10.) Yet Dr. Powers concedes that NSAIDs "may cause an episode of AKI like the episode [Mr. Bales] had in July 2011" (*id.* at 9) and that AKI can progress to CKD:

> I think most of us [nephrologists] believe now that AKI and CKD are artificial separations, but there's a continuum between acute kidney injury and chronic kidney disease. And all of the things that I mentioned in my report are ways that that progression can occur.

(Powers Dep., Hindy Cert., Ex. U, at 132:11–16.) Dr. Powers's own statements thus foreclose his rationale for excluding NSAIDs as a cause of Mr. Bales's CKD.[2]

Dr. Powers also fails to offer any reliable basis for ruling out aging as a cause of CKD. Dr. Powers concedes that the first available serum creatinine value in Mr. Bales's medical records—taken in July 2011 when Mr. Bales was 71—reflected "significant kidney dysfunction." (Powers Report (*Bales*), Hindy Cert., Ex. Q, at 8.) Moreover, Dr. Powers agrees that renal function declines with age and that "roughly 50 percent of Americans over the age of 70 have CKD stages 3 through 5." (Powers Dep., Hindy Cert., Ex. U, at 93:20–94:13; *see also id.* at 130:23–131:3 (referencing

[2] In addition, Dr. Powers's opinion is contradicted by Plaintiffs' expert, Dr. Anthony Gilet, who testified that NSAIDs can cause CKD (Gilet Dep., Hindy Cert. Ex. T, at 49:17–20), and Dr. Rinder, who disclaimed any opinion as to whether Mr. Bales's NSAID use caused his CKD (Rinder Dep., Hindy Cert., Ex. R, at 68:7–12).

"aging kidney disease progression").) Dr. Powers never explains why aging did not cause Mr. Bales's CKD.

According to Dr. Powers, in July 2011, Mr. Bales may have had "an episode of acute on chronic kidney disease from AKI or acute interstitial nephritis (AIN) superimposed on his CKD." (Powers Report (*Bales*), Hindy Cert., Ex. Q, at 8.) But, at his deposition, Dr. Powers conceded that Mr. Bales's July 2011 episode "was related to his NSAID use." (Powers Dep., Hindy Cert., Ex. N, at 393:2–6; *see also id.* at 398:24–399:1.)

Finally, Dr. Powers's general belief that PPIs are nephrotoxic (Powers Report, Hindy Cert., Ex. Q, at 8) is insufficient to establish causation as a matter of law. *See Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790.

In sum, Dr. Powers's opinion that PPIs are the sole cause of Mr. Bales's CKD is unreliable because he "offers *no* explanation for why he . . . has concluded that [hypertension, NSAIDs, and aging were] not the sole cause" of Mr. Bales's CKD. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Bales*.

D. Dr. Powers Fails to Reliably Explain Why Kidney Stones and NSAIDs Are Not the Sole Cause of Ms. Lee's Kidney Disease

Dr. Powers agrees that kidney stones and NSAIDs can cause CKD. He concedes that kidney stones can cause hydronephrosis (*i.e.*, kidney swelling), which can cause temporary or permanent loss of kidney function. (Powers Dep., Hindy

Cert., Ex. N, at 481:19–483:9.) And he concedes that NSAIDs are nephrotoxic and a risk factor for CKD. (*Id.* at 94:14–24, 115:11–14, 314:21–23.) Dr. Powers fails to offer any reliable basis for why kidney stones and NSAIDs were not the sole cause of Ms. Lee's CKD.

It is undisputed that Ms. Lee suffered from kidney stones. In fact, Dr. Powers agrees that "the [treating] radiologist's reading of [certain CT scans of Ms. Lee's kidneys when she had kidney stones] included a finding of hydronephrosis or obstruction of the urinary collecting system where it leaves the pelvis of the kidney and narrows to become the ureter." (Powers Report (*Lee*), Hindy Cert., Ex. V, at 3.) Likewise, there is no dispute that Ms. Lee used NSAIDs. Indeed, Dr. Powers concedes that Ms. Lee's kidney function improved after she discontinued NSAIDs and agrees that NSAIDs negatively impacted her kidney function. (Powers Dep., Hindy Cert., Ex. N, at 446:9–448:1.)

Nevertheless, Dr. Powers opines that Nexium-induced AIN led to Ms. Lee's CKD. (*See* Powers Report (*Lee*), Hindy Cert., Ex. V, at 11–12.) In offering that opinion, Dr. Powers claims that Ms. Lee's "stones were few and small, certainly not obstructing the kidneys." (*Id.* at 9.) Although Dr. Powers did not review the radiological images of Ms. Lee's kidneys (Powers Dep., Hindy Cert., Ex. N, at 420:22–24.), he purports to rule out kidney stones as a cause of Ms. Lee's CKD on

the ground that treating radiologists who reviewed Ms. Lee's CT scans supposedly "overread" them:

> I find no evidence that obstruction was present in Mrs. Lee's case, but rather there were repeated times where there was "overreading" of the CT or ultrasound by the radiologist. The reason for this overread was the presence of parapelvic cysts in her kidneys.

(Powers Report (*Lee*), Hindy Cert, Ex, V, at 3.) Dr. Powers's assertion that treating radiologists "overread" CT scans is pure speculation given his admission that he did not review the underlying CT scan images himself. (Powers Dep., Hindy Cert., Ex. N, at 420:22–24.) He thus lacks any basis to disagree with the treating radiologists' findings.

Dr. Powers's opinion that Nexium-induced AIN led to Ms. Lee's CKD is likewise without evidentiary basis. As a threshold matter, Dr. Powers concedes that Ms. Lee's medical records do not contain a single reference to AIN, and Dr. Powers cannot identify any treating physician who believed that Ms. Lee experienced AIN. (*Id.* at 430:9–431:10.) Dr. Powers also concedes that no kidney biopsy was ever performed to confirm whether Ms. Lee had AIN. (*Id.* at 426:14–19.) Nor did Dr. Powers rely on any objective clinical findings evidencing AIN aside from a mild "GFR drop[] from the baseline of 90 to around somewhere in the 60s" (*id.* at 425:15–20)—an occurrence that could be explained by myriad events besides AIN. Rather, Dr. Powers speculated that if Ms. Lee had a biopsy today, "I *think* it would show

chronic tubulointerstitial disease" with "scarring," "collapse of the interstitium, [and] tubular atrophy." (*Id.* at 427:5–22 (emphasis added).)

Even more troubling, when confronted with evidence that Ms. Lee's serum creatinine increased by just 0.2 between July 2010 and March 2011—when Dr. Powers contends Ms. Lee experienced Nexium-induced AIN—Dr. Powers conceded that the evidence was inconclusive because "we have two data points and we don't know where those two data points are in the scheme of her kidney disease." (*Id.* at 428:18–429:13.) Instead, Dr. Powers speculated that "acute kidney injury *may* have occurred in that time frame." (*Id.* at 429:12–13 (emphasis added).) According to Dr. Powers, "we have a prolonged period of time without a lab test. *Something* happened between those two times, and now we have worsening of her kidney function. The most likely thing to have occurred is acute kidney injury," and "given that she's on nonsteroidals and Nexium at the time, I *think* [it] is probably a vasomotor nephropathy on top of a baseline Nexium toxicity." (*Id.* at 429:24–430:7 (emphasis added).) In other words, Dr. Powers concedes that Ms. Lee's slight rise in serum creatinine between July 2010 and March 2011 was due in part to NSAIDs, which decrease blood flow to the kidney (vasomotor nephropathy). He fails to explain why NSAIDs were not the sole cause of this episode, and his speculation is precisely the type of opinion *Daubert* is designed to exclude. *See In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 (3d Cir. 1994) ("[T]he expert's opinion must be

based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation'; the expert must have 'good grounds' for his or her belief." (quoting *Daubert*, 509 U.S. at 590)).

Finally, as noted, Dr. Powers's general belief that PPIs are nephrotoxic (Powers General Report, Hindy Cert., Ex. W, at 22) is insufficient to establish causation as a matter of law. *See Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790.

In sum, Dr. Powers's opinion that Nexium-induced AIN caused Ms. Lee's CKD is unreliable because he "offers *no* explanation for why he . . . has concluded that [kidney stones and NSAIDs were] not the sole cause" of Ms. Lee's CKD. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Lee*.

E. Dr. Fine Fails to Reliably Explain Why Hypertension and Obesity Are Not the Sole Cause of Mr. Rieder's Kidney Disease

Dr. Fine concedes that hypertension and obesity can cause CKD. (*See* Fine Report (*Rieder*), Hindy Cert., Ex. X, at 11.) He also concedes that hypertension and obesity contributed to the development of Mr. Rieder's CKD. (*Id.*) But he does not stop there. He tacks on Nexium as "a substantial factor"—on top of hypertension and obesity—that purportedly contributed to Mr. Rieder's CKD. (*Id.* at 8.) Dr. Fine has no reliable basis for concluding that Nexium substantially contributed to

Mr. Rieder's CKD and fails to offer any reliable basis why hypertension and obesity were not the sole cause of CKD.

Dr. Fine's own testimony directly contradicts the notion that Nexium was a substantial factor in Mr. Rieder's CKD. Dr. Fine concedes that he does not know whether Mr. Rieder would have developed CKD had Mr. Rieder never used Nexium:

> Q. Is it your opinion that in the absence of Nexium, Mr. Rieder would not have CKD?
>
> . . .
>
> THE WITNESS: *I think it's hard to say*.

(Fine Dep., Hindy Cert., Ex. Y, at 347:2–7 (emphasis added).) That concession should end the matter, but there is more.

According to Dr. Fine, Nexium substantially contributed to Mr. Rieder's CKD because "there is substantial evidence that PPI use causes progression of renal injury in vulnerable patients," and Mr. Rieder was a "continuous" user of Nexium. (Fine Report (*Rieder*), Hindy Cert., Ex. X, at 11.) In other words, because (according to Dr. Fine) Nexium *can* cause CKD, it *did* cause CKD here. As a matter of law, that rationale is insufficient to establish specific causation. *See Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790. Nor does the mere fact that (according to Dr. Fine) Mr. Rieder developed kidney disease while taking Nexium suffice. *See Ervin*, 492 F.3d at 904–05 ("The mere existence of a temporal relationship between taking

a medication and the onset of symptoms does not show a sufficient causal relationship.").

The law requires an explanation for why hypertension and obesity are not the sole cause of Mr. Rieder's CKD, as well as an evidentiary basis for Dr. Fine's conclusion that Nexium substantially contributed to Mr. Rieder's CKD—and Dr. Fine provides neither. Instead, he simply brushes aside, without adequate basis, evidence that undermines his conclusion. For instance, Mr. Rieder's kidney function stabilized after he lost weight, and Dr. Fine acknowledges "that some of Mr. Rieder's reduction in proteinuria"—a urine abnormality associated with renal dysfunction—"was associated with his weight loss." (Fine Report (*Rieder*), Hindy Cert., Ex. X, at 11.) He then leaps to the conclusory assertion that "[t]he stabilization of [Mr. Rieder's] kidney function after discontinuation of the Nexium is more consistent with the removal of the [PPI] exposure tha[n] with the effect of his weight loss." (*Id.*) This baseless assertion is especially suspect in light of Dr. Fine's concession that "[o]besity has been implicated in the development of CKD." (*Id.*)

Simply put, Dr. Fine's opinion that Nexium was a substantial factor in Mr. Rieder's CKD is unreliable because he "offers *no* explanation for why he . . . has concluded that [hypertension and obesity were] not the sole cause" of Mr. Rieder's CKD. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Rieder*.

F. Dr. Lafayette Fails to Reliably Explain Why Diabetes and Hypertension Are Not the Sole Cause of Ms. Nelson's Kidney Disease

Dr. Lafayette concedes that Ms. Nelson has had "longstanding Type II diabetes with a diagnosis dating back to 1993" and "clearly is at risk for diabetic nephropathy." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 2, 4.) He also concedes that Ms. Nelson has had "high blood pressure" since "the early 1990s," and is "at great risk of vascular disease-causing chronic kidney disease, with virtually every risk factor, including a family history." (*Id.*) And he concedes that diabetes and hypertension, either individually or in combination, have impacted Ms. Nelson's eyes, heart, nerves, and brain. (Lafayette Dep., Hindy Cert., Ex. AA, at 226:6–228:25, 230:14–231:3, 232:14–18.) Notwithstanding these concessions, Dr. Lafayette claims diabetes and hypertension spared Ms. Nelson's kidneys. Instead, Dr. Lafayette opines that "[t]he only factor that . . . was a substantial contributing factor to Ms. Nelson's kidney disease was her PPI use." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 1.) Dr. Lafayette fails to offer any reliable basis for why diabetes and hypertension were not the sole cause of Ms. Nelson's CKD.

To begin, Dr. Lafayette's opinion is inconsistent with the opinions of Ms. Nelson's treating nephrologist since 2016 who attributes her CKD to diabetes and her other treating physicians, none of whom attribute her CKD to Nexium. (Mutinga Dep., Hindy Cert., Ex. BB, at 10:21–11:4, 60:4–16; Lafayette Dep. Ex. 11,

Hindy Cert., Ex. CC, at 000803; Daniels Dep., Hindy Cert., Ex. DD, at 42:15–18; McCann Dep., Hindy Cert., Ex. EE, at 14:7–11.) Dr. Lafayette admitted he could not identify a single treating healthcare provider who shared his opinion that Nexium substantially contributed to Ms. Nelson's CKD. (Lafayette Dep., Hindy Cert., Ex. AA, at 254:14–25, 255:15–20.)

Dr. Lafayette has no reliable basis for ruling out diabetic kidney disease. He asserts that Ms. Nelson's "disease is atypical for diabetic nephropathy as she had no typical albuminuria and proteinuria predating her presentation with chronic kidney disease." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 4.) Medical literature directly contradicts that proposition. At deposition, Dr. Lafayette was shown an article titled "Diabetic Kidney Disease: Manifestations, Evaluation, and Diagnosis" from *UpToDate*, an electronic clinical resource tool for physicians that Dr. Lafayette considers "a reliable source of information within the medical community." (Lafayette Dep., Hindy Cert., Ex. AA, at 263:13–20, 263:25–264:3.) That article unequivocally states that "[a]lbuminuria is not required to make a clinical diagnosis of diabetic kidney disease." (*See id.* at 267:9–268:2.) In particular, the article explains that "[a]mong patients with Type 2 diabetes and reduced eGFR [estimated glomerular filtration rate], 39 to 52 percent are nonalbuminuric." (*Id.* at 271:15–18.) While Dr. Lafayette disputed these findings, he admitted he had not reviewed the article or the underlying data and acknowledged that "patients with diabetes . . . can

present without albuminuria." (*See id.* at 267:9–268:17.) He offers no explanation for why Ms. Nelson could not be one of these patients. Indeed, Dr. Lafayette agreed that decreased eGFR in diabetic kidney disease can occur and progress to advanced stages of CKD before the onset or without the development of albuminuria. (*Id*. at 275:5–9.)

Dr. Lafayette also purports to rule out diabetic kidney disease on the ground that Ms. Nelson "did not have neuropathy until later and well after her progression of renal disease." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 4.) Specifically, Dr. Lafayette contends that Ms. Nelson's neuropathy did not appear "until roughly 2018." (*Id.* at 2.) But Dr. Lafayette acknowledged that medical records show evidence of neuropathy as early as five years before that, in 2013. (*See* Lafayette Dep., Hindy Cert., Ex. AA, at 278:6–282:23.) Most importantly, he conceded he cannot rule out diabetic kidney disease based on the timing of onset of Ms. Nelson's neuropathy. (*Id.* at 284:9–12.)

Dr. Lafayette's basis for ruling out hypertensive kidney disease is similarly unsound. According to Dr. Lafayette, Ms. Nelson's "pattern of injury with rapid progression at the same time as development of mild proteinuria is not typical of microvascular disease, where there is usually no to very limited proteinuria and slower progression when the blood pressure is well controlled." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 4.) But Dr. Lafayette conceded that multiple disease

processes can contribute to the development of kidney disease and that Ms. Nelson possessed multiple risk factors for CKD in addition to hypertension, including diabetes, heart disease, and obesity. (*See* Lafayette Dep., Hindy Cert., Ex. AA, at 217:19–218:9, 225:21–226:2, 285:25–286:5.)

Dr. Lafayette's opinion that Nexium substantially contributed to Ms. Nelson's CKD is likewise unreliable. When asked, "by what mechanism do you believe [Nexium] substantially contributed to Ms. Nelson's CKD," Dr. Lafayette answered: "I don't have any way to assess that." (*Id.* at 290:22–291:8.) Unable to explain how Nexium purportedly injured Ms. Nelson specifically, Dr. Lafayette rests his specific causation opinion on the generalized notion that "[t]here is abundant evidence demonstrating that PPI therapy *can* cause kidney damage and *can* lead to advanced kidney failure, exactly as seen in the case of Ms. Nelson." (Lafayette Report (*Nelson*), Hindy Cert., Ex. Z, at 5 (emphasis added).) On that basis, he concludes "that Ms. Nelson, having been exposed to constant and high dose PPI therapy from 2007 to 2016, suffered a complication of this therapy resulting in chronic kidney disease and its substantial progression." (*Id.*) Of course, an expert's belief that a medication can cause a particular injury does not provide grounds for concluding that the medication in fact caused that injury, *see Guinn*, 602 F.3d at 1255; *In re Lipitor*, 185 F. Supp. 3d at 790, nor does the mere use of a medication at the time an expert believes the injury manifested suffice, *see Ervin*, 492 F.3d at 904–05.

In sum, Dr. Lafayette "offers *no* explanation for why he . . . has concluded that [diabetes and hypertension] w[ere] not the sole cause" of Ms. Nelson's CKD. *See Heller*, 167 F.3d at 156 (internal quotation marks omitted). The Court should exclude his specific causation opinion in *Nelson*.

III. THE COURT SHOULD EXCLUDE DR. SILBERZWEIG'S SPECIFIC CAUSATION OPINIONS FOR OTHER CASE-SPECIFIC REASONS

A. Dr. Silberzweig's Specific Causation Opinion in *Foster* Is Based on Incomplete Information

The Court should exclude Dr. Silberzweig's specific causation opinion in *Foster* for the additional reason that he failed to review highly pertinent and available evidence in forming his opinion. *See, e.g.*, *State Farm Fire & Cas. Co. v. Steffen*, 948 F. Supp. 2d 434, 443 (E.D. Pa. 2013) (excluding expert opinion because expert's "method did not consider all available evidence and alternate hypotheses"); *McAndrew v. Garlock Equip. Co.*, 537 F. Supp. 2d 731, 735 (M.D. Pa. 2008) (excluding expert opinion where expert did not consider relevant evidence because the "opinion is not based upon sufficient facts and data").

In forming his opinion, Dr. Silberzweig never reviewed records from Mr. Foster's eight-day hospitalization in September 2009, during which Mr. Foster complained of chest pain, wheezing, and breathing difficulties. (Silberzweig Dep., Hindy Cert., Ex. A, at 609:7–610:1, 610:20–611:6; Silberzweig Dep. Ex. 32, Hindy Cert., Ex. D, at 008444.) Significantly, this hospitalization occurred right when Dr.

Silberzweig contends Mr. Foster began "a progressive and rapid decline in kidney function." (Silberzweig Report (*Foster*), Hindy Cert., Ex. G, at 6.) These records revealed the following information relevant to Mr. Foster's kidney disease:

- Mr. Foster's blood pressure was 188/105, which constitutes a hypertensive crisis. (*See* Silberzweig Dep., Hindy Cert., Ex. A, at 611:12–16.)
- Mr. Foster's serum creatinine was elevated at 1.57, and his estimated glomerular filtration rate of 57 was outside the normal range. (*See id.* at 611:20–612:9.)
- Mr. Foster had been noncompliant with his diabetes management, including by refusing to take insulin and snacking between meals. (*See id.* at 613:18–614:1, 622:22–623:20; Silberzweig Dep. Ex. 32, Hindy Cert., Ex. D, at 008469.)
- Mr. Foster was experiencing diabetic neuropathy and nocturia, which indicates poor diabetes control. (Silberzweig Dep., Hindy Cert., Ex. A, at 614:11–20.)
- During his hospitalization, Mr. Foster was diagnosed with kidney disease secondary to biopsy-proven diabetic glomerulosclerosis. (*Id.* at 617:17–23, 619:14–620:11; Silberzweig Dep. Ex. 32, Hindy Cert., Ex. D, at 008474.)

- Discharge notes state that Mr. Foster had post-catherization acute renal failure during hospitalization, and Dr. Silberzweig cannot rule out dye contrast-induced nephropathy as its cause. (Silberzweig Dep., Hindy Cert., Ex. A, at 621:23–622:4, 622:12–21.)

In sum, these unreviewed medical records show that, contemporaneous with a rapid decline in kidney function, Mr. Foster had kidney insults unrelated to Nexium, including a hypertensive crisis, poor diabetes control, and contrast-induced AKI. (*See id.* at 626:2–21.) Dr. Silberzweig conceded that these records bear on, and might impact, his opinion:

> Q. Would you have liked to have seen these hospitalization reports before your deposition today?
>
> A. Yes.
>
> Q. Is it possible that reviewing these hospitalization records will cause you to change any of your opinions in your report?
>
> A. As I say, it depends on the -- the full picture of the data. Is it possible? Yes.

(*Id.* at 627:16–24.)

The Court should exclude Dr. Silberzweig's specific causation opinion in *Foster* for this additional reason.

B. Dr. Silberzweig's Specific Causation Opinion in *Kersch* Is Inconsistent with Diagnostic Methods Used in His Clinical Practice

The methodology Dr. Silberzweig used to conclude that Nexium substantially contributed to four of Mr. Kersch's AKIs is inconsistent with methods Dr. Silberzweig has used in his own practice to diagnose the cause of AKI. Because Dr. Silberzweig failed to "employ . . . the same level of intellectual rigor that characterizes" his own clinical practice, the Court should exclude his specific causation opinion in *Kersch*. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

Dr. Silberzweig testified that he diagnosed a patient with PPI-induced AIN after withdrawing all the patient's potentially nephrotoxic medicines and reintroducing them one at a time to determine which had caused the AIN. (Silberzweig Dep., Hindy Cert., Ex. I, at 39:18–40:20.) By that method, Dr. Silberzweig determined that the patient's clinical symptoms appeared while using PPIs and resolved when PPIs were withdrawn, allowing Dr. Silberzweig to conclude that the patient's AIN was due to PPIs. (*Id.*)

There is no equivalent evidence in Mr. Kersch's case. Dr. Silberzweig asserts that Mr. Kersch used PPIs "consistently" for eight years starting in February 2010, including over time periods when his clinical AKI symptoms (in the form of elevated serum creatinine) both developed *and* resolved. (Silberzweig Report (*Kersch*), Hindy Cert., Ex. M, at 3, 5.) Dr. Silberzweig's opinion that Nexium substantially

contributed to AKIs in July 2015, July 2016, March 2017, and August 2017 (Silberzweig Dep., Hindy Cert., Ex. I, at 388:17–389:17)—despite the fact that Nexium was never withdrawn and reintroduced during this timeframe—is inconsistent with the methodology Dr. Silberzweig used in his own practice to diagnose PPI-induced AKI. For this additional reason, the Court should exclude his specific causation opinion in *Kersch*.

CONCLUSION

Defendants respectfully request that the Court grant this motion.

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Respectfully Submitted,

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